

#### CERTIFICATE OF MAILING

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Attorney for Applicant(s)

PATENT APPLICATION Docket No.: TUC920030131US1

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Angqin Bai et al.	)
Serial No.:	10/717,942	) ) Group Art
Filing Date:	November 20, 2003	) Unit:
For:	APPARATUS, SYSTEM, AND METHOD FOR MAINTAINING TASK PRIORITIZATION AND LOAD BALANCING	) )

# INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement discloses information which has come to the attention of applicant and his attorneys and is being submitted so as to comply with the duty of disclosure set forth in 37 C.F.R. § 1.56. In accordance with 37 C.F.R. § 1.97(b), this Statement is being filed within three (3) months of the filing date of the above-identified application or before the mailing date of a first Action on the merits.

Neither applicant nor his attorneys make any representation that any information disclosed herein may be "prior art" within the meaning of that term under 35 U.S.C. §§ 102 or 103. Moreover, pursuant to 37 C.F.R. § 1.97, the filing of this Information Disclosure Statement

shall not be construed as a representation that a search has been made or as an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

In accordance with 37 C.F.R. § 1.98, this Information Disclosure Statement includes and is accompanied by:

- 1. A completed copy of Form PTO-1449 listing the patents, publications and other information being submitted for consideration; and
- 2. A legible copy of each publication and other item of information in written form listed on the enclosed Form PTO-1449.

### NON-ENGLISH INFORMATION

Pursuant to 37 C.F.R. § 1.98, following is a concise explanation of the relevance (as it is presently understood by the individual designated in 37 C.F.R. § 1.56(c) most knowledgeable about the content of the information), of each listed patent, publication or other information that is not in the English language.

#### ABSTRACT:

PROBLEM TO BE SOLVED: To improve transmission and reception efficiency in a network. SOLUTION: In transmission, a task for controlling a lower-level network hierarchy is successively called from a task for controlling an upper-level network hierarchy, which in reception, a task for controlling the upper-level network hierarchy is called successively from a task for controlling the lower-level network hierarchy. The information-processing device comprises a transmission queue13 for passing transmission data to the lowest task for controlling the lowest network hierarchy, a transmission completion queue116 for passing the identifier of data whose transmission has been completed, a lower reception queue 114 for passing reception data to the lowest task, and an upper reception queue 115 for passing reception data to the highest task for controlling the highest network hierarchy.

### ABSTRACT:

PROBLEM TO BE SOLVED: To surely perform communication between the plural tasks of the equal priority and a device driver at high speed.

SOLUTION: The 1<sup>st</sup> task investigates the state of a 2<sup>nd</sup> task occupation flag 2 by turning on a 1<sup>st</sup> task occupation flag1 and when the 2<sup>nd</sup> task occupation flag 2 is turnedon, control authority is applied to the other task by turning off the 1<sup>st</sup> task occupation flag. When the 2<sup>nd</sup> task occupation flag is turned off, the 1<sup>st</sup> task writes data in a data table and updates a task write pointer. When all the data are completely written in the data table, the 1<sup>st</sup> task occupation flag 1 is turned off, and the control authority of its own central processing unit is abandoned. A DSP driver reads data from a transmission data table until the contents of the write pointer get equal with the contents of a read pointer.

Respectfully submitted,

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FORM PTO-1449	SERIAL NO. 10/717,942	ATTORNEY DOCKET NO. TUC920030131US1
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	FILING DATE November 20, 2003	GROUP ART UNIT
(use several sheets if necessary)	APPLICANT(S): Angqin Bai et al.	•

# REFERENCE DESIGNATION

# **U.S. PATENT DOCUMENTS**

EXAMINE R INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
	A1	5,247,671	09/21/1993	Adkins et al.	395/650	02/14/1990
	A2	5,745,736	04/28/1998	Picart	395/500	03/06/1996
	А3	2003/0147350	08/07/2003	Wookey et al.	370/231	02/04/2002
	A4	2003/0149598	08/07/2003	Santoso et al.	705/2	01/27/2003

#### **FOREIGN PATENT DOCUMENTS**

EXAMINE		DOCUMENT			CLASS/	TRANS	SLATION
INITIAL		NUMBER	DATE	COUNTRY	SUBCLASS	YES	NO
	A5	JP9091157A	04/04/1997	JP	GO6F9/46		х
	A6	JP2002077308	03/15/2002	JP	HO4L29/10		х

# **NON-PATENT DOCUMENTS**

EXAMINE R INITIAL		DOCUMENT (Including Author, Title, Source, and Pertinent Pages
	A7	AN-7100718, "Real-time data transmission mechanism in optical fiber industrial network." Huang Haifeng, et al. Chinese Journal of Electronics, vol. 10, no.4, pp.511-515, Oct. 2001
	A8	AN-7100326, "Implementation of Progressive data transmission in distributed virtual environment." Xiaohong Jiang, et al. The International Society for Optical Engineering, vol. 4303, pp. 159-166, 2001

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).



A9	"Prioritized Resource Allocation for Stressed Networks" Beard, CC. et al.; 1999/2000; IEEE/ACM Transactions on Networking, Vol. 9, No. 5, Oct. 2001
A10	"A SMART Scheduler for Multimedia Applications" Nieh, J. et al.; 2003; ACM Transactions on Computer Systems, Vol. 21, No. 2, May 2003, Pages 117-163.

EXAMINER	DATE CONSIDERED